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REMARKS

Claims 44-49 have been amended to correct a mistake in the previous amendment.

In the Office Action, the Examiner rejected claims 1-6, 9-11, 14-16, 22-36, 39-44, 48, and 49 under 35 U.S.C. §103(a) as being unpatentable over the Ando patent in view of the Egol material.

Independent claim 1 is directed to a method of estimating purchases made by customers of a supplier of interest from other suppliers, and the method is performed on a computer. According to the method, panelist data regarding purchases made by panelists from the supplier of interest and from the other suppliers are read. The panelists are a subset of the customers. A relationship between the purchases made by the panelists from the supplier of interest and the purchases made by the panelists from the other suppliers is determined. Customer data regarding purchases made by the customers from the supplier of interest are read. Based upon the customer data and the relationship, the purchases made by the customers from the other suppliers are estimated.

Applicants' Argument - The Ando patent discloses various arrangements for forecasting demand. For example, the Ando patent discloses in column 1, lines 19-30 that, according to one demand forecasting system, a

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fuzzy operation is applied to sales results that include the sales demand of individual products, the component ratio of the sales, and profit rate in order to calculate an index showing the effect of sales promotion on individual products. The fuzzy operation is based on the knowledge of an expert in sales plans and an analysis of the fluctuation in the trend of sales.

The Ando patent further discloses in column 1, lines 31-45 that, according to another demand forecasting system, the sales of each product are collected from a sample shop. The sample shop is extracted from plural shops. The sales in all shops is related to the sales in the sample shop on the bases of ratios of the sales in the sample shop to the sales in all shops and the characteristics of commodities of the sample shop (price zone, target customer age, selling technique etc.). Sales transition patterns and final sales are estimated based on the collected sales data. The estimated sales transition patterns and final sales are stored. A pattern similar to the estimated sales transition patterns of all shops is selected from the stored sales transition patterns, and the estimated final sales are regarded as the estimated sales of the commodities. Production is planned based on selected pattern and the estimated final sales.

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The Ando patent concludes in column 1, lines 46-63 that, in these demand forecasting systems, demand is forecasted by analyzing the trend of past sales, and that the main goal of such systems is to apply statistical analysis techniques and econometric modeling. However, if product trends change in short cycles, the data used in the analyses rapidly becomes old such that the precision of the demand forecasts suffers. In order to maintain a high degree of precision for the demand forecast, maintenance of the forecasting software, maintenance of the knowledge, and maintenance of the conditions are frequently required. However, such frequent maintenance is difficult to achieve.

The Ando patent discloses in column 1, line 66 through column 3, line 3 that its invention is intended to solve these problems by storing a plurality of models of neural networks including a model that forecasts demand from data of the past several months, a model that forecasts demand from data of the same period of the previous year, and a model that forecasts demand from both the latest data and data of the same period of the previous year. Sales are fed into these models so that the models learn during a short period of time, such as weekly, to predict demand depending on sales trends.

As can be seen, the Ando patent discloses various arrangements for forecasting demand. However, as

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explained in previous responses, demand forecasting is not relevant to the invention of independent claim 1 for at least two reasons.

First, independent claim 1 is limited to estimating past sales, whereas demand forecasting predicts future sales.

Second, demand forecasting does not estimate the purchases by the customers of a particular product supplier as required by independent claim 1, but rather predicts purchases by consumers as a whole.

Accordingly, the Ando patent is not pertinent to the invention of independent claim 1.

The Examiner, however, asserts that column 1, lines 31-45 discloses estimating purchases by the customers of a supplier of interest from other suppliers. Specifically, the Examiner asserts that (i) the sample shop is supplier of interest of independent claim 1, (ii) the plural shops are the other suppliers of interest of independent claim 1, and (iii) purchases by the customers of the sample shop (the supplier of interest) from other suppliers purchases (the plural shops) are estimated. However, this assertion is inaccurate because it is based on misinterpretation of the Ando patent.

The sample shop is not a supplier of interest because it is not separate from the other suppliers (i.e., the plural shops). Instead, the sample shop is

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extracted from the plural shops. Thus, the sample shop does not have data that it has generated on its own; rather, its data is derived from the plural shops. The sample shop has no identity that is separate from the plural shops. In fact, the sample shop does not exist. It is merely a mathematical model to distill the data from the plural shops.

Thus, for example, the Ando patent specifically discloses at column 1, lines 32 and 33 that the sample shop is extracted from the plural shops. Accordingly, rather than storing the data from many (plural) shops, the plural shops may be represented as a single (sample) shop.

Accordingly, the sample shop, in the words of independent claim 1, does not represent a supplier of interest, but merely represents a statistically smaller embodiment of the other suppliers. No single supplier exists according to the teachings of the Ando that is separate from the other suppliers. Thus, there is no supplier of interest disclosed in the Ando patent.

Furthermore, if sales from the sample shop and from the plural shops are used in the method of independent claim 1 as suggested by the Examiner, the method of independent claim 1 would not work. The method of independent claim 1 determines the purchases made by the customers of a supplier of interest from other

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suppliers based on (i) the purchases made by customers of the supplier interest from the supplier of interest and (ii) the purchases made by a subset of the customers of the supplier interest from the supplier of interest and from other suppliers.

The data that the Examiner is using, however, includes only the purchasers made from the other suppliers (i.e., the plural shops) and a subset of these purchases (i.e., the sample shop). Thus, this data cannot be used by itself to determine the purchases made by the customers of one of the plural shops from the other shops. Indeed, there is no disclosure in the Ando patent that the data of one supplier is segmented out from the data of the plural shops so that it can be used to establish the relationship recited in independent claim 1. The data of the sample shop certainly does not represent this data because the sample shop data is extracted from the plural shops. Therefore, the data that the Examiner is using cannot be used to implement the invention of independent claim 1.

In addition, because the sample shop is merely a subset of the data provided by the plural shops, the ratio of the sample shop data to the plural shop data does not yield the relationship recited in independent claim 1.

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Also, the Examiner recognizes that the Ando patent does not disclose the use of a panel to acquire panelist data. Therefore, the Examiner cites the Egol material.

The Egol material describes a survey in which 1000 customers of a supplier are questioned about the two things that these customers consider most important about purchasing products. The 1000 customers of the supplier are also questioned about the purchases that they make from other suppliers. This information is used to determine the appeal of new product offerings to the customers of the supplier of interest. The Examiner incorrectly concludes from this description that purchases from the other suppliers by the customers of the supplier of interest are being estimated. They are not. This data is only being used to determine the appeal of new product offerings.

Moreover, if it assumed that the 1000 customers is a subset of the larger customer base of the supplier of interest, then the Egol material contains no description or suggestion of collecting data both from the 1000 customers and from the larger customer base.

The Examiner points to lines 19, 21, and 22 of the Egol material as disclosing that the survey answers are used to estimate the purchases from the other suppliers by the customers of the supplier of interest.

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Instead, this portion of the Egol material merely discloses that 1000 customers of a supplier are questioned about the two things that the customers consider most important about purchasing products and that these same customers are also questioned about the purchases that they make from other suppliers. There is no disclosure or suggestion in the Egol material of estimating the purchases from other suppliers by the customers of a supplier of interest. To the contrary, the Egol material is directed to determining the appeal of new product offerings.

Also, the Egol material does not suggest modifying the sample shop as disclosed in the Ando patent so that the sample data is independent of the plural shops. For example, the Egol material does not disclose that data is collected from the 1000 customers regarding the purchases they make from the supplier of interest. The Egol material merely describes that the 1000 customers are questioned about the two things that these customers consider most important about purchasing products.

Additionally, the Egol material is directed to determining product appeal and the Ando patent is directed to demand forecasting. Thus, neither reference is related to the invention of independent claim 1 and,

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therefore, neither reference suggests a combination that would meet the invention of independent claim 1.

Accordingly, because neither the Ando patent nor the Egol material discloses or suggests estimating the purchases from other suppliers by the customers of a supplier of interest, the combination of the Ando patent and the Egol material cannot teach the invention of independent claim 1.

Moreover, because the Ando patent merely relates to demand forecasting and the Egol material merely relates to determining new product appeal, the combination of the Ando patent and the Egol material cannot teach estimating the purchases from other suppliers by the customers of an independent supplier of interest as recited in independent claim 1.

Furthermore, because the Ando patent does not disclose a supplier of interest and other suppliers, a premise of the Examiner's rejection is incorrect and the rejection must, therefore, fail.

For all of the reasons give above, independent claim 1 is not unpatentable over the Ando patent in view of the Egol material.

Examiner's Response 1 - The Examiner addresses applicants' first argument, that independent claim 1 is limited to estimating past sales whereas demand forecasting predicts future sales, by asserting that the

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Ando patent is not strictly concerned with future sales. To support this assertion, the Examiner points to column 1, lines 33-35 of the Ando patent.

Applicants' Rebuttal - This portion of the Ando patent merely states that the sales of each product are collected from a sample shop, that the sales of the sample shop are extracted from the sales of the plural shops, and that the sales of the plural shops to the sales of the sample shop based on ratios between the sales of the sample shop and the sales of the plural shops.

The Examiner concludes from this portion of the Ando patent that past sales in the plural shops are estimated based on the sales in the sample shop. However, this portion of the Ando patent merely discloses how the sample shop is created, and this paragraph of the Ando patent goes on to say that data collected from the sample shop is used to plan production.

Accordingly, the sales of the plural shops are not estimated from the sales of the sample shop because (i) the sample shop has no sales of its own, (ii) the data of the sample shop is merely a distillation of the data of the plural shops, and (iii) the ratios are not estimates but are merely an expression of the distillation.

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The Yamamoto patent newly cited by the Examiner is not pertinent to the invention of independent claim 1. The Yamamoto patent merely discloses forecasting demand based on past sales in order to control production to meet the forecasted demand and was cited in the Ando merely for that disclosure. The Yamamoto patent does not disclose the estimation of past sales as set out in independent claim 1.

The Examiner specifically cites column 8, lines 1-36 of the Yamamoto patent. This portion of the Yamamoto patent discloses that POS terminals 1a, 1b, 1c . . . are installed at sample outlets representing a given percentage of the total of such retail outlets. A production size setting means 2 includes a scale-up estimating routine 5, a demand forecast routine 6 and a production size determining routine 7. The scale-up estimating routine 5 receives sales information from the POS terminals 1a, 1b, 1c . . . and scales up sales based on a ratio of the number of products purchased by all outlets to the number of products purchased by the sample outlets and based on a deviation factor.

This scaled-up information is used to forecast demand, and the forecasted demand is used to determine production. There is no suggestion in the Yamamoto patent to use this scaled-up information to determine the number of products purchased from other suppliers by the

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customers of a supplier of interest. Accordingly, the Yamamoto patent is not relevant to the present invention.

Examiner's Response 2 - The Examiner addresses applicants' second argument, that demand forecasting does not focus on the customers of a particular product supplier but rather focuses on consumers as a whole or on one or more segments of consumers, by asserting that the sample shop as disclosed in the Ando patent is a supplier of interest.

Applicants' Rebuttal - As the Examiner admits, the sample shop is extracted from the plural shops. Thus, the sample shop represents the other suppliers; it does not represent a supplier of interest.

Examiner's Response 3 - The Examiner addresses applicants' third argument, that the sample shop disclosed in Ando patent is merely a representation (a sort of average) of the plural shops and does not have data that it has generated on its own and does not really exist and is merely a mathematical model of the plural shops, by asserting that applicants' have misread the Ando patent.

Applicants' Rebuttal - The Examiner has focused on the wrong word in the portion of the Ando patent that the Examiner cites. This portion of the Ando patent clearly states that the sample shop is extracted from the plural shops. In other words, the data from the plural

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shops is used to create the data of the sample shop. Once the sample shop is created, data is collected from the sample shop in order to forecast demand. Thus, the data that is collected from the sample shop was first derived from the plural shops. Accordingly, the sample shop is merely a mathematical model of the plural shops.

This meaning of the first part of the paragraph at lines 31-45 of column 1 of the Ando patent is clear by considering the remaining parts of this paragraph. Thus, the next clause in this paragraph of the Ando patent (i.e., the sales amount in all shops is presumed from the sales amount in the sample shop on the basis of the sales amount ratio in the sample shop to the sales amount in all shops and the characteristics of commodities of the sample shop (price zone, target customer age, selling technique etc.)) merely means that, in extracting (creating) the sample shop, the sales of the plural shops are put into the sample shop on a proportional basis.

The next clause in this paragraph (i.e., while sales transition patterns of plural types and final sales estimated amount on the basis of the past transition of sales results are stored) states that final sales amounts of the plural shops are estimated from sales transition patterns and that these sales transition patterns and final estimated sales amounts are stored.

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The next clause in this paragraph (i.e., a pattern similar to the estimated transition pattern of sales amount of all shops is selected from the stored sales transition patterns, and the final sales estimated amount is regarded as the sales estimated amount of the commodities) states that a sale transition pattern representative of the plural shops is selected and the final estimated sales amounts are regarded as the final commodities sales.

The last clause in this paragraph (i.e., the production is planned accordingly (Japanese Patent Publication No. 8-16950)) states that the selected pattern and the final commodities sales are used in production planning. In other words, demand is forecast and is used to determine production requirements.

As can be seen, the sample shop is not a supplier of interest within the context of independent claim 1.

Examiner's Response 4 - The Examiner does not address applicants' fourth argument that the method of independent claim 1 would not work if sales from the sample shop and from the plural shops are used in the method of independent claim 1 as suggested by the Examiner.

Applicants' Rebuttal - Applicants again points out that the method of independent claim 1 determines the

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purchases made by the customers of a supplier of interest from other suppliers when all that is known is (i) the purchases made by customers of the supplier interest from the supplier of interest and (ii) the purchases made by a subset of the customers of the supplier interest from the supplier of interest and from other suppliers.

The Ando patent does not disclose or suggest this method and instead deals with demand forecasting in all of its parts.

Examiner's Response 5 - The Examiner does not address applicants' fifth argument that, because the sample shop is merely a subset of the data provided by the plural shops, the ratio of the sample shop data to the plural shop data does not yield the relationship recited in independent claim 1.

Applicants' Rebuttal - N/A

Examiner's Response 6 - The Examiner addresses applicants' sixth argument, that the Examiner incorrectly concludes that the Egol material discloses that purchases from the other suppliers made by the customers of the supplier of interest are being estimated, by asserting that the Examiner is not relying on the Egol material to teach this feature because this feature is taught by the Ando patent.

Applicants' Rebuttal - As discussed above, the Ando patent relates to demand forecasting in its entirety

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and does not disclose the estimation of purchases from other suppliers by the customers of a supplier of interest. Because the Egol material likewise does not disclose the estimation of purchases from other suppliers by the customers of a supplier of interest, the combination of the Ando patent and the Egol material cannot disclose the invention of independent claim 1.

Examiner's Response 7 - The Examiner addresses applicants' seventh argument, that there is no disclosure in the Egol material of estimating the purchases from other suppliers by the customers of a supplier of interest, by asserting that the Examiner is not relying on the Egol material to teach this feature because this feature is taught by the Ando patent.

Applicants' Rebuttal - The point of applicants' seventh argument is that, because neither the Ando patent nor the Egol material teaches the estimation of the purchases from other suppliers by the customers of a supplier of interest, the combination of the Ando patent and the Egol material cannot teach this feature of the claimed invention. Therefore, independent claim 1 would not have been obvious over the Ando patent in view of the Egol material.

Examiner's Response 8 - The Examiner addresses applicants' eighth argument, that the Egol material does not suggest modifying the sample shop as disclosed in the

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Ando patent so that the sample data is independent of the plural shops, by asserting that applicants have misinterpreted the sample shop as disclosed in the Ando patent.

Applicants' Rebuttal - As shown above, applicants reading of the Ando patent is correct.

Examiner's Response 9 - The Examiner does not address applicants' ninth argument that the Egol material is directed to determining product appeal and the Ando patent is directed to demand forecasting so that neither reference is directed to the invention of independent claim 1.

Applicants' Rebuttal - N/A

Examiner's Response 10 - The Examiner addresses applicants' tenth argument, that neither the Ando patent nor the Egol material discloses estimating the purchases from other suppliers by the customers of a supplier of interest such that the combination of the Ando patent and the Egol material cannot teach the invention of independent claim 1, by asserting that the Ando patent does too disclose estimating the purchases from other suppliers by the customers of an independent supplier of interest.

Applicants' Rebuttal - As shown above, the Ando patent discloses no such thing.

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Independent claim 30 is directed to a method of estimating purchases made by customers of a supplier of interest from other suppliers. According to the method, customer data regarding purchases made by the customers from the supplier of interest are read, and panelist data regarding purchases made by panelists from the supplier of interest and from the other suppliers are also read. The panelists are a subset of the customers. Purchases made by the customers from the other suppliers are estimated based upon the customer data and the panelist data.

Applicants' Argument - As discussed above, neither the Ando patent nor the Egol material suggests an arrangement for estimating past sales. Also, neither the Ando patent nor the Egol material suggests collecting and processing data in order to estimate purchases made by customers of a supplier from other suppliers based on data from those customers and from a subset of those customers.

Accordingly, independent claim 30 is not unpatentable over the Ando patent in view of the Egol material.

Examiner's Response - See above.

Applicants' Rebuttal - See above.

Independent claim 39 is directed to a method in which purchases made by customers of a supplier of

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interest are estimated. A linear relationship between purchases made by panelists from the supplier of interest and purchases made by the panelists from the other suppliers is determined, and purchases by the customers from the other suppliers are estimated based upon the linear relationship.

Applicants' Argument - Neither the Ando patent nor the Egol material suggests an arrangement for estimating past sales. Also, neither the Ando patent nor the Egol material suggests collecting and processing data to estimate purchases made by customers of a supplier of interest based on data from panelists.

Accordingly, independent claim 39 is not unpatentable over the Ando patent in view of the Egol material.

Examiner's Response - See above.

Applicants' Rebuttal - See above.

Independent claim 43 is patentable over the Ando patent and the Egol material for similar reasons.

Examiner's Response - See above.

Applicants' Rebuttal - See above.

In rejecting claims 35 and 45-47, the Examiner has added the Besser material to the Ando patent and the Egol material. The Besser material does not disclose estimating the purchases made by the customers from other

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suppliers based on a relationship between the purchases made by panelists from the supplier of interest and purchases made by the panelists from the other suppliers and based on customer data regarding purchases made by the customers from the supplier of interest.

Likewise as shown above, the Ando patent and the Egol material do not disclose estimating the purchases made by the customers from other suppliers based on a relationship between the purchases made by panelists from the supplier of interest and purchases made by the panelists from the other suppliers and based on customer data regarding purchases made by the customers from the supplier of interest.

Accordingly, independent claim 1 is not unpatentable over the Ando patent in view of the Egol material and further in view of the Besser material.

Similarly, the other independent claims of the present application are not unpatentable over the Ando patent in view of the Egol material and further in view of the Besser material.

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CONCLUSION

In view of the above, the claims of the present application patentably distinguish over the art applied by the Examiner. Accordingly, allowance of these claims and issuance of the present application are respectfully requested.

Respectfully submitted,

SCHIFF, HARDIN, & WAITE
6600 Sears Tower
233 South Wacker Drive
Chicago, Illinois 60606-6402
(312) 258-5774

By: 

Trevor B. Joyce
Reg. No: 25,842

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